

Notice of Allowability

Application No.

10/773,141

Applicant(s)

FERRARI ET AL.

Examiner

Art Unit

Erica E Cadugan

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to dkt no. 2545-0439 filed 2/9/04 and interview of 5/10/05.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 09 February 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/13/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Timothy Klima on May 10, 2005.

3. The application has been amended as follows:

Claim 1 (Currently Amended). A machine tool, comprising:

- at least one pair of slide ways, set apart one from another and extending parallel with a predominating longitudinal axis;
- a machining station delimited laterally by the slide ways and presenting a first zone and a second zone adjacent one to the other;
- a traveling gantry associated with the pair of slide ways and carrying a machining head positioned above the machining station, capable of movement along the ways in such a way that the machining head can be positioned in the first and second zones;
- a magazine placed alongside at least one of the slide ways and containing a plurality of machining tools attachable to the machining head, comprising a first changer element positioned to coincide with the respective first zone of the station, and a second changer element positioned to coincide with the respective second zone, each capable of movement between a first operating position in which it occupies the magazine for the purpose of selecting at least one of the tools,

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and a second position in which it occupies the machining station for the purpose of fitting the selected at least one tool to the machining head.

Claim 2 (Currently Amended). A machine tool as in claim 1, wherein the magazine further comprises a chamber, and a selector device capable of movement internally of the chamber so that it can offer [a] one of the plurality of tools to each changer element when in the relative first operating position.

In claim 3, line 1, --tool-- has been added after “machine”.

In claim 3, line 1, --in-- has been added after “as”.

In claim 4, line 1, --tool-- has been added after “machine”.

In claim 5, line 1, --tool-- has been added after “machine”.

In claim 6, line 1, --tool-- has been added after “machine”.

In claim 6, line 3, “a tool” has been changed to “one of the plurality of tools”.

In claim 6, last line, --one-- has been added prior to “tool”.

In claim 7, line 1, --tool-- has been added after “machine”.

Claim 8 (Currently Amended). A machine tool as in claim 7, wherein the selector device comprises a substantially vertical column slidable alongside the supports, also a slide traversable vertically along the length of the column and presenting a gripper assembly, capable of movement between a first position of alignment with the horizontal supports, in which [a] one of the machining tools is taken up by the gripper assembly, and a second position of proximity to the first or second changer element in which the one tool is transferred from the gripper assembly to the respective changer element.

In claim 9, line 1, --tool-- has been added after “machine”.

Claim 10 (Currently Amended). A machine tool as in claim 9, wherein the belt presents a plurality of carrier portions ordered along the [developable] length of the loop and serving to support [the] single ones of the plurality of tools, each carrier portion capable of movement between a first position in which a selected tool is held in alignment with the belt, and a second position, [assumed] along the rectilinear branch, in which the selected tool is offered to the first or the second changer element.

In claim 11, line 1, --tool-- has been added after “machine”.

In claim 11, line 3, --is-- has been inserted prior to “associated”.

Claim 12 (Currently Amended). A machine tool as in claim [2] 11, wherein each [the] changer element occupies a respective opening fashioned in the side wall associated with the magazine.

In claim 13, line 1, --tool-- has been added after “machine”.

In claim 13, last line, --the changer elements are-- has been added after “when”.

In claim 14, line 1, --tool-- has been added after “machine”.

In claim 15, line 1, --tool-- has been added after “machine”.

In claim 15, line 1, --in-- has been added after “as”.

Claim 16 (Currently Amended). A machine tool as in claim 5, wherein the arm is rotatable about a substantially vertical axis between a first position corresponding to the first position of the changer element, in which one of the plurality of [a] tools is taken up from the magazine by one of the gripper elements, and a second position corresponding to the second position of the changer element, in which the one tool is offered by the one gripper element to the machining head.

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In claim 17, line 1, --tool-- has been added after “machine”.

In claim 17, last line, --the changer elements are-- has been added after “when”.

In claim 18, line 1, --tool-- has been added after “machine”.

In claim 18, last line, --the changer elements are-- has been added after “when”.

In claim 19, line 1, --tool-- has been added after “machine”.

In claim 19, last line, --the changer elements are-- has been added after “when”.

In claim 20, line 1, --tool-- has been added after “machine”.

In claim 20, last line, --the changer elements are-- has been added after “when”.

4. The following is an examiner’s statement of reasons for allowance:

U.S. Pat. No. 4,683,638 to Winkler et al. teaches a machine tool including first and second tool changers (18, 18a, Figure 1) that both access the same tool magazine (see Figures 1-2), and that both supply tools to the same spindle or machining head. However, the device taught by Winkler does not include “at least one pair of slideways, set apart one from another and extending parallel with a predominating longitudinal axis; a machining station delimited laterally by the slide ways and presenting a first zone and a second zone adjacent one to the other” and “a traveling gantry associated with the pair of slide ways and carrying a machining head positioned above the machining station, capable of movement along the ways in such a way that the machining head can be positioned in the first and second zones” as set forth in independent claim 1. Also, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of Winkler et al., and thus, for at least this reasoning, Winkler et al. does not render obvious the present invention as set forth in independent claim 1.

EP 255736 ('736) teaches plural changers that access the same magazine, but each changer supplies tools to a different machining head (Figure 43). Thus, '736 doesn't teach the "first" and "second" changers that are "each capable of movement between a first operating position in which it occupies the magazine for the purpose of selecting at least one of the tools, and a second position in which it occupies the machining station for the purpose of fitting the selected at least one tool to the machining head" as set forth in independent claim 1.

Additionally, the machine tool taught by '736 is not a gantry type tool. Also, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to so modify the teachings of '736, and thus, for at least this reasoning, '736 does not render obvious the present invention as set forth in independent claim 1.

References such as U.S. Pat. No. 6,068,431 to Line teach a gantry-type machine tool wherein a machining head is mounted on a moveable gantry. However, '431 does not teach "a magazine placed alongside at least one of the slide ways and containing a plurality of machining tools attachable to the machining head, comprising a first changer element positioned to coincide with the respective first zone of the station, and a second changer element positioned to coincide with the respective second zone, each capable of movement between a first operating position in which it occupies the magazine for the purpose of selecting at least one of the tools, and a second position in which it occupies the machining station for the purpose of fitting the selected at least one tool to the machining head" as set forth in independent claim 1.

The foregoing described prior art being exemplary of the closest prior art of record to the present invention, the prior art of record neither anticipates nor renders obvious the present invention as set forth in the independent claim.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

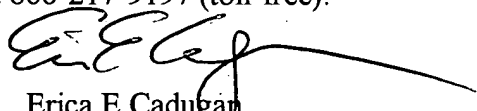
Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 7:30 a.m. to 5:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H. Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Erica E Cadugan
Primary Examiner
Art Unit 3722

eec
May 10, 2005